March 12, 1986

TO: File

FROM: D. Wayne Hedberg, Permit Supervisor/Reclamation Hydrologist

RE: Stout Construction, Cyanide Heap Leaching Operation, DOE/021/005, Iron County, Utah

On March 7, 1986, Division representatives D. Wayne Hedberg and David M. Wham met with Bureau of Land Management (BLM) field representatives Mr. Paul Carter and Mr. Dale Ross to visit the site location for DOE/021/005. The DOE was filed in 1978 by Stout Construction Company. There is no file record of any Division personnel ever having visited the site.

The site is located in a remote section of Iron County, Utah, in Sections 13 and 14, Township 31 South, Range 20 West. It is very close to the Nevada border and is approximately 22 miles north of Modena, Utah in the Hamlin Valley area. The site is the location of a currently suspended gold and silver mining and cyanide heap leaching operation. The location notice and filing of claim was found onsite. The name of the locater is Mr. Clifford Phillips, Mr. Dee Burgess and Mr. David M. Schmutz. The claim number is #204698. The name of the mining claim is the East Summit #2. It was located on October 2, 1978.

The principal ore-bearing section that has most recently been mined is currently a pit which has been excavated into the side of the mountain. It is approximately four acres in surface disturbance. Presently, the highwall on the back of the pit is estimated at 60 feet in height. There is a small spring piped down into the base of the pit. There is a portable pump adjacent to the impounded water which directs water out of the pit, into a discharge line which courses down the side of the mountain to a large steel holding tank. The tank is approximately 15 feet in diameter and estimated to be 30 feet high. From this large tank, the water is directed downslope to the heap leaching operation.

Present site disturbance for the heap leaching operation was estimated at five to six acres. This disturbed site includes a cleared area where the blasted ore body is crushed run through a grisley and stockpiled before it is placed upon the leaching pads. The leach pad and associated facilities were encompassed in a barbwire fence. However, the fence was not intact and in disrepair. Only two warning signs were observed and posted in this operational area.

The leaching facilities area included several storage sheds which had the processing and leachate stripping equipment contained within. There was a carbon filtration absorpsion system apparently in use. The pregnant solution is most likely stripped of the precious metals via an electro-winning process as one of the trailers had a series of steel wool rolls and associated baths of chemicals that obviously had been used to some extent.

A series of interconnected steel tanks were buried in the ground adjacent to the activated carbon filtration system. The leachate from the leach dumps is piped directly into the tanks. The leachate is pumped from these tanks through the carbon activated system and then to a make-up storage tank before it was directed back onto the leach dump through the sprinkler system. It was obvious that some heavy gage plastic had been laid down underneath the leach dumps. The extent of this plastic sheeting could not be determined.

A four-inch PVC pipe was draining leachate solution from the pads directly into the series of holding tanks. From the lowest tank, a four-inch line lead down into an ephemeral drainage immediately below the leach site. There was a valve on the end of this pipe which was open and drainage was observed exiting the pipe and coursing downstream. The tanks were transferring drainage solution from one tank to the other which originated from runoff from the leach pad area. The drainage probably originated from recent snowmelt and subsequent percolation through the heaps.

There were barrels of cyanogam, a cyanide bearing chemical onsite. Some barrels were empty and open while others were covered. Also, in one of the open storage sheds were stockpiles of ammonium nitrate, bags of caustic soda and five-gallon pails of new motor oil. A diesel generator was located immediately adjacent to the carbon column treatment shed and it was very obvious that oil and/or diesel fuel had been leaking onto the ground for some time. The fuel/oil and was draining into the ephemeral channel directly below the site. Trash and associated garbage from the active mining operations as well as habitation of the two mobile home trailers which had been hauled onsite was indiscriminantly scattered around the site.

There were no obvious signs that any stockpiling of topsoil had occurred in any of the areas that had been disturbed. The vegetation is predominantly a pinyon-juniper with sagebrush, rabbitbrush and associated grasses and forbs typical of this vegetation type. Approximately 30 pictures were taken at this mine site location.

At the termination of the site inspection, Mr. Carter asked the Division representatives to develop a list of suggestions or recommendations to correct the problems observed onsite. Apparently the operator has failed to file a plan of operations with the BLM for this operation. The BLM does not have a performance bond to cover reclamation costs or damages resulting from this operation. Please refer to the attached letter to Mr. Paul Carter for the Division's preliminary recommendations.

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